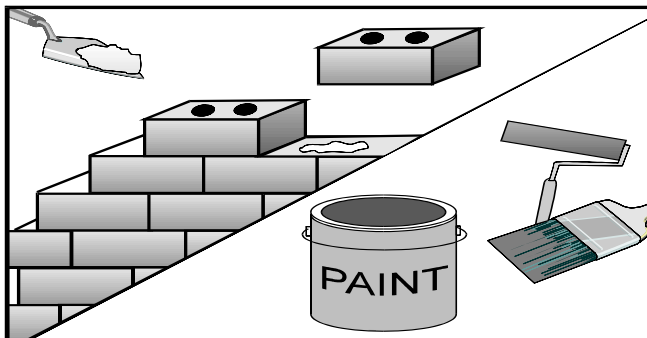


ACTIVITY: Structure Construction and Painting

CP – 04

**Targeted Constituents**

! Significant Benefit		™ Partial Benefit		" Low or Unknown Benefit	
" Sediment	" Heavy Metals	! Floatable Materials	" Oxygen Demanding Substances		
" Nutrients	™ Toxic Materials	" Oil & Grease	" Bacteria & Viruses	! Construction Wastes	

Implementation Requirements

! High		™ Medium		" Low	
" Capital Costs	" O & M Costs	" Maintenance	" Suitability for Slopes >5%	™ Training	

Description

Prevent or reduce the discharge of pollutants to stormwater from structure construction and painting by enclosing, covering, or berming building material storage areas, using good housekeeping practices, using safer alternative products, and training employees and subcontractors. This management practice is likely to cause a significant reduction in floatable materials and other construction wastes as well as a partial reduction of toxic materials.

Approach

- # Keep the work site clean and orderly. Remove debris in a timely fashion. Sweep the area regularly.
- # Use soil erosion control techniques if bare ground is exposed. See Temporary Construction Site Management Practices.
- # Buy recycled or less hazardous products to the maximum extent practicable.
- # Conduct painting operations consistent with local air quality and OSHA regulations.
- # Properly store paints and solvents. See CP-05: Material Delivery, Storage and Use in this section.
- # Properly store and dispose waste materials generated from the activity. See the waste management BMPs CP-7, 8, 9, 10 and 11 in this section.
- # Recycle residual paints, solvents, lumber, and other materials to the maximum extent practicable.
- # Make sure that nearby storm drains are well marked to minimize the chance of

inadvertent disposal of residual paints and other liquids.

- # Clean the storm drain system in the immediate construction area after construction is completed.
- # Educate employees who are doing the work of the importance of keeping pollutants out of the stormwater system.
- # Inform subcontractors of company policy on these matters and include appropriate provisions in their contract to make certain proper housekeeping and disposal practices are implemented.
- # For a quick reference on disposal alternatives for specific wastes, see the table presented in the Employee/Subcontractor Training BMP fact sheet.
- # For oil-based paints, paint out brushes to the extent practical, and filter and reuse thinners and solvents.
- # Never clean paintbrushes or rinse paint containers into a street, gutter, storm drain or watercourse.
- # Dispose of any paint, thinners, residue, and sludges that cannot be recycled as hazardous waste. For a quick reference on disposal alternatives for paint, thinners, residue and sludges see the table presented in the Employee/Subcontractor Training BMP fact sheet.
- # Latex paint and paint cans, used brushes, rags, absorbent materials, and drop cloths, when thoroughly dry and are no longer hazardous, may be disposed of with other construction debris.
- # Use recycled and less hazardous products when practical.
- # Recycle residual paints, solvents, lumber, and other materials.

Requirements

- # Costs (Capital, O&M)
 - These BMPs are generally of low to moderate cost.

Maintenance

- # Maintenance should be minimal.
- # Spot check employees and subcontractors at least monthly throughout the job to ensure appropriate practices are being employed.

Limitations

- # Safer alternative products may not be available, suitable, or effective in every case.
- # Hazardous waste that cannot be re-used or recycled must be disposed of by a licensed hazardous waste hauler.
- # Be certain that actions to help stormwater quality are consistent with State-and Fed-OSHA and air quality regulations.

Additional

Construction and painting activities can generate pollutants that can reach stormwater

Information

if proper care is not taken. The sources of these contaminants may be solvents, paints, paint and varnish removers, finishing residues, spent thinners, soap cleaners, kerosene, asphalt and concrete materials, adhesive residues, and old asbestos insulation. For specific information on some of these wastes see the following BMPs in this section:

CP-07 Solid Waste Management,
CP-08 Hazardous Waste Management,
CP-09 Contaminated Soil Management, and
CP-10 Concrete Waste Management.

More specific information on structure construction practices is listed below.

Erosion and Sediment Control

If the work involves exposing large areas of soil or if old buildings are being torn down and not replaced in the near future, employ the appropriate soil erosion and control techniques described in the Temporary Construction Management Practices' (TCP) section.

Storm/Sanitary Sewer Connections

Carefully install all plumbing and stormwater systems. Cross connections between the sanitary and storm drain systems, as well as any other connections into the stormwater system from inside a building, are illegal. Color code or flag pipelines on the project site to prevent such connections, and train construction personnel. See CP-11: Sanitary/Septic Waste Management for additional details.

Painting

Local air pollution regulations may, in many areas of the state, specify painting procedures that if properly carried out are usually sufficient to protect stormwater quality. These regulations may require that painting operations be properly enclosed or covered to avoid drift. Use temporary scaffolding to hang drop cloths or draperies to prevent drift. Application equipment that minimizes overspray also helps. When using sealants on wood, pavement, roofs, etc., quickly clean up spills. Remove excess liquid with absorbent material or rags.

If painting requires scraping or sand blasting of the existing surface, use a drop cloth to collect most of the chips. Dispose the residue properly. If the paint contains lead or tributyl tin, it is considered a hazardous waste. Refer to the waste management BMPs in this section for more information.

Mix paint indoors, in a containment area, or in a flat unpaved area not subject to significant erosion. Do so even during dry weather because cleanup of a spill will never be 100% effective. Dried paint will erode from sloped surfaces and be washed away by storms. If using water based paints, clean the application equipment in a sink that is connected to the sanitary sewer or in a containment area where the dried paint can be readily removed. Properly store leftover paints if they are to be kept for the next job, or dispose of properly.

Roof Work

When working on roofs, if small particles have accumulated in the gutter, either sweep out the gutter or wash the gutter and trap the particles at the outlet of the downspout. A sock or geofabric placed over the outlet may effectively trap the materials. If the downspout is lined tight, place a temporary plug at the first convenient point in the

storm drain and pump out the water with a vacuum truck, and clean the catch basin sump where you placed the plug.

**Primary
References**

California Storm Water Best Management Practice Handbooks, Construction and Industrial Handbooks, CDM et.al. for the California SWQTF, 1993.

Caltrans Storm Water Quality Handbooks, CDM et.al. for the California Department of Transportation, 1997.

**Subordinate
References**

Blueprint for a Clean Bay-Construction-Related Industries: Best Management Practices for Storm Water Pollution Prevention; Santa Clara Valley Nonpoint Source Pollution Control Program, 1992.